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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,096	03/12/2004	Richard M. Hogan	4022-000014	8094

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EXAMINER	
DESAI, ANISH P	
ART UNIT	**PAPER NUMBER**
1771	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/800,096	HOGAN ET AL.	
	Examiner	Art Unit	
	Anish Desai	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *13-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *13-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed on 04/11/07 after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/11/07 has been entered.

2. Claims 1-12 and 31-46 are cancelled. Claims 13-30 are pending.

3. The 35 USC Section 102 rejections based on Krueger et al. (US 4,552,714) are withdrawn because Kruger does not teach the expendable layer A is readily peelable from the adhesive layer as presently claimed.

4. The 35 USC Section 102 rejections based on Ohya et al. (US 4,567,090) are withdrawn because Kruger does not teach the expendable layer A is readily peelable from the adhesive layer as presently claimed.

5. The 35 USC Section 102 rejections based on Korpman (US 4,379,806) are withdrawn because Kruger does not teach the expendable layer A is readily peelable from the adhesive layer as presently claimed.

6. The 35 USC Section 102/103 rejections to claims 13-22 based on Katsuki et al. (US 4,427,743) are withdrawn, because Katsuki does not teach or suggest the expendable layer A is readily peelable from the adhesive layer as presently claimed.

7. A new ground of rejection is made in view of Pedginski et al. (US 5,882,753).

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated Pedginski et al. (US 5,882,753).

Pedginski teaches extrudable release coating, specifically Pedginski teaches a release-coated film, an adhesive tape comprising a release-coated film (abstract). Further, Pedginski teaches that adhesives used in the present invention can be coextruded with the release layer alone (column 10 lines 29-35). Further, the release coating of Pedginski comprises thermoplastic polymers such as polyethylene and polypropylene (column 8 lines 53-55 and lines 65-67, column 9 lines 1-5). Moreover, the adhesive layer of Pedginski includes thermoplastic adhesives such as poly-alpha-olefin and polyurethane (column 9 lines 22-26). The release coating of Pedginski is inherently peelable from the adhesive layer, because such is the intended use of the release coatings in the adhesive art (see column 1 lines 15-22). The Examiner is

equating the release coating of Pedginski comprising thermoplastic polymer as an expendable polymeric layer A and the adhesive layer of Pedginski as the thermoplastic adhesive layer B. Accordingly, Pedginski anticipates the claimed invention.

9. Claim 21 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Pedginski et al. (US 5,882,753).

Given that Pedginski teaches what has been set forth above, and especially with regards to claim 13, it is the Examiner's position that the expendable polymeric layer of Pedginski would necessarily have a tensile strength greater than the mechanical bond between the thermoplastic adhesive layer and the expendable polymeric layer. Support for said presumption is based on the fact that the two layer co-extruded A-B composite sheet of both inventions i.e. that of Applicant and Pedginski comprises an expendable polymeric layer A comprising a polyolefin material and a thermoplastic adhesive layer B. The product of Pedginski and Applicant is structurally and compositionally equivalent. Therefore, the presently claimed properties would have been present. The burden is upon Applicant to prove it otherwise (see *In re Fitzgerald*, 205 USPQ 594). In addition, the presently claimed properties would obviously have been present once the invention of Pedginski is provided (see *In re Best*, 195 USPQ at 433, footnote 4 CCPA 1977). Accordingly, Pedginski anticipates or strongly suggests the claimed invention.

10. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pedginski et al. (US 5,882,753).

The invention of Pedginski is previously disclosed. Although, Pedginski does not explicitly teach adhesive layer comprising plurality of individual adhesive layers, it would

have been obvious to one having ordinary skill in the art at the time the invention was made to provide plurality of individual adhesive layers, motivated by the desire to enhance the strength of the adhesive layer and strongly bond the adhesive sheet to a substrate.

As to the claim requirement of the thickness of the polymeric layer and the thermoplastic polyurethane layer (adhesive layer), Pedginski does not disclose the thickness of the polymeric layer of the polyurethane adhesive layer, however Takagi discloses the general conditions of a claim, specifically Takagi discloses a two-layer co-extruded A-B composite sheet having an expendable polymeric layer A comprising a polyolefin and thermoplastic adhesive layer B comprising polyurethane. Therefore, absent any unexpected results, choosing the thickness of the polymeric layer and the adhesive layer would have been obvious to one of ordinary skill in the art, motivated by the desire to form a composite sheet with suitable strength and flexibility.

11. Claims 22, 23, 25-27, 29 and 30 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Katsuki et al. (US 4,427,743).

Katsuki teaches a laminated panel for use as safety glasses for vehicle (Column 4, lines 61-62) having good transparency (Column 2, lines 38-39). The laminated panel of Katsuki is comprised of a plastic sheet and a glass sheet (abstract). Figure 2 of Katsuki shows, a laminated panel comprising a cushioning layer 4 sandwiched between the two plastic sheets 3A' and 3B' (Column 5, lines 26-30). Additionally, Figure 2 of Katsuki discloses layers 1A', 2A', 2B' and 1B'. According to Katsuki et al., fabrics made

from polypropylene fibers can be embedded in the plastic sheets (Column 9, lines 9-11 and Column 9, lines 25 and 27). The Examiner is collectively equating layers 1A'/2A'/3A/ and 3B'/2B'/1B' of Katsuki as an expendable polymeric layer comprising a polyolefin material layer A respectively. Moreover, the cushioning layer 4 of Katsuki is made from resins such as copolymer of ethylene and vinyl acetate and polyurethane (Column 5, line 54-55) and has sufficient tackiness or adhesiveness (Column 7, lines 44-47). Thus, the cushioning layer 4 of Katsuki is equated to the thermoplastic adhesive layer B. This interpretation of Katsuki's disclosure meets the claim requirement of A-B-A composite sheet.

Regarding claim 26, the polyurethane based cushioning layer of Katsuki reads on the thermoplastic adhesive layer B made of polyurethane. With respect to claim 27, at column 6, line 42, Katsuki et al. teach two cushioning layers (Column 6, line 42). With respect to claim 29, at column 12, line 65, Katsuki et al. teach a polyurethane layer with thickness of 2 mm, which equates to 0.079 in (using 1 mm = 0.039 in).

With respect to the recitation "co-extruded A-B-A composite sheet", the said recitations are directed to a product by process limitations. The products by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. "Even though product by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product by process claim is the same as or obvious from a product of the prior art,

the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983). In the instantly claimed subject matter, the composite sheet of the applicant comprises an expendable polymeric layer A, a thermoplastic adhesive layer B, and an expendable polymeric layer A (A-B-A) as claimed. As previously disclosed, Katsuki discloses a laminated panel comprising A-B-A composite sheet. Thus, the laminated panel of Katsuki is similar to the applicant's co-extruded A-B or A-B-A composite wherein A is an expendable polymeric layer and B is a thermoplastic adhesive layer.

With respect to claims 21 and 30, Although Katsuki does not explicitly teach the claimed property of the expendable polymeric layer having a tensile strength greater than the mechanical bond between the thermoplastic adhesive layer and the expendable polymeric layer, it is reasonable to presume that said property is necessarily present in the laminated panel of Katsuki et al. because like material has a like property. The applicant is using an expendable polymeric layer and a thermoplastic polyurethane adhesive layer to form a composite sheet and Katsuki also disclose a laminated panel comprising a plastic sheet and a cushioning layer made of a polyurethane layer wherein the polyurethane layer has sufficient adhesiveness. Thus,

the laminated panel of Katsuki et al. is similar in structure to the composite sheet of the present invention. Thus, the presently claimed property of the expendable polymeric layer having a tensile strength greater than the mechanical bond between the thermoplastic adhesive layer and the expendable polymeric layer would have been present.

12. Claims 24 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuki et al. (US 4,427,743) as applied to claim 22 above, and further in view of Friedman et al. (US 6,159,608).

The invention of Katsuki is previously disclosed. According to Katsuki, there is no limitation on the material of the plastic sheet and transparent resins with moderate flexibility and strength that can be used as plastic sheets (Column 5, lines 3-7). Katsuki is silent with respect to teaching the polymeric layer made of polyethylene and the thickness of the polymeric layer from 0.003 in to 0.01 in. However, Friedman discloses high clarity optical and safety glass laminates (abstract) used in the automotive industry (Column 1, lines 10-13). Additionally, Friedman discloses polyethylene based films having high clarity, very high moisture resistance, high UV light stability, and good heat resistance (Column 3, lines 18-22) used as an interlayer film in forming laminated glass product. Regarding claim 28, the thickness of the polyethylene film of Friedman is from 0.125 mm to 1.0 mm (column 6 lines 48-50), which converts to 0.0049 in to 0.039 in respectively (using 1 mm = 0.039 in). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a polyethylene film of

Friedman with a given thickness as a plastic sheet of Katsuki, motivated by the desire to provide a laminated panel with high clarity.

Response to Arguments

13. Applicant's arguments filed on 04/11/07 have been fully considered but they are not persuasive.

102/103 type rejections in view of Katsuki are maintained for the following reasons. The applicant argues that Katsuki does not disclose three layer A-B-A composite sheet but rather discloses a five-layer composite. The examiner acknowledges that Katsuki reference discloses a five-layer composite; however note that the claim language does not explicitly exclude other layers. Additionally, as set forth in this Office Action, the Examiner's interpretation of Katsuki's disclosure is different from Applicant's interpretation. As stated previously, The Examiner is collectively equating layers 1A'/2A'/3A/ and 3B'/2B'/1B' of Katsuki as an expendable polymeric layer comprising a polyolefin material layer A respectively. Moreover, the cushioning layer 4 of Katsuki is made from resins such as copolymer of ethylene and vinyl acetate and polyurethane (Column 5, line 54-55) and has sufficient tackiness or adhesiveness (Column 7, lines 44-47). Thus, the cushioning layer 4 of Katsuki is equated to the thermoplastic adhesive layer B. This interpretation of Katsuki's disclosure meets the claim requirement of A-B-A composite sheet.

It is noted that Applicant has generally shown disagreement with the Examiner's rejections of claims 15, 19, 24, and 28. However, Applicant has not pointed out any

specific errors in the Examiner's rejection, therefore the Examiner's comments set forth above in this Office Action are equally pertinent to the rejection of these claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anish Desai whose telephone number is 571-272-6467. The examiner can normally be reached on Monday-Friday, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elizabeth M. Cole/
Primary Examiner,
Art Unit 1771

/A. D./
APD